

## **RECYCLING PUBLIC ADVISORY COUNCIL MEETING**

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**Wednesday, January 24, 2018**

**1:00pm to 3:00pm**

**Government Support Services/Fleet Office  
Blue Hen Conference Room  
100 Enterprise Place, Suite 4  
Dover DE 19904  
(302) 857-4531**

### **APPROVED MINUTES**

#### **Call to Order, Introductions, Roll Call**

- Meeting called to order by Chair Stan Mills at approximately 1:08pm. Roll call of members followed.

#### **Public Comments**

- Correspondence: n/a
- Members of Public:
  - Chair acknowledged the public in attendance and thanked them for coming
  - No one offered comments.

#### **Approval of Minutes**

- **October 25, 2017 Meeting**
  - The minutes were approved unanimously.
- **November 15, 2017 Meeting**
  - Five changes were suggested with concurrence by council:
    1. Change title to identify it as a “Meeting Summary.”
    2. Correct minutes misidentified for approval as October 25, 2017.
    3. Identify Marianne Cinaglia as present.
    4. Under “Old Business” reposition entire “Report” language and bullets to first item of “New Business”
    5. Add new bullets under “Old Business:”
      - ✓ Status of Universal Recycling Grant and Low-Interest Loan Programs
      - ✓ Cycle 7 has closed but about 2/3 of recipients asked for an extension. Granted so Cycle 7 will not close until first quarter next year. Cycle 8 ongoing with media invoices coming in regularly.
      - ✓ Status of 15<sup>th</sup> Annual Report
        - Follow up to report – Messaging to Governor. Stan indicated he conferred with DNREC representative about deferring on a letter to the Governor citing the 16<sup>th</sup> Annual Report would be published and distributed soon and so the letter was not timely not necessary. Council concurred.

#### **Membership status**

- There still is a vacancy for one of the community based-public interest seats. The chair will contact the Governor's Office to check status.
- Marianne requested a list of current RPAC members and when their terms are up. The chair indicated he would distribute.

### **Outreach/Education Committee Report**

- Jackie Howard gave a brief update on DNREC's Recycling Education and Outreach media campaign and showed the members some pictures taken at a recent school recycling event.

### **Old Business**

- **Status of Universal Recycling Grant and Low-Interest Loan Programs.**
  - Jackie Howard, DNREC Recycling Program reported that Cycle 8 is ending on January 31<sup>st</sup> with some recipients receiving extensions to complete their scopes of work; additionally, a few Cycle 7 grants are still active due to previous Amendments; grant financials for Cycle 7 should finalize by the end of CY 2018; grant financials for Cycle 8 will not finalize until the end of CY 2020 due to the media campaign's 3 year scope of work.

### **New Business**

- **Discussion and consideration for approval of first draft of RPAC's 16<sup>th</sup> Annual Report to the Governor and General Assembly.**
  - Council was polled; no one indicated they had sufficient time to study the document. Chair Mills suggested we conduct a brief review and then defer further review until the February meeting.
  - Jackie Howard indicated that Marj Crofts already had given edits on the Executive Summary.
  - Various other comments were made on wordsmithing
  - In reference to the tables in Chapter 5 identifying "Entities Funded During the XYZ Cycle" Marj Crofts mentioned that she would like to use a term other than "TBD" or "to be determined" in referencing grants financials as this term indicates an "I don't know" status instead of a perspective of "the grants are still in progress" status. Jackie will work with Marj to ensure a better term is used in the upcoming RPAC Annual Report and in other informational documents and communications.
- **Report on current organics activities under DNREC's Division of Waste & Hazardous Substances permits.**
  - Mindy Anthony, DNREC, Environmental Scientist with the Division of Waste & Hazardous Substances presented on current organics facilities permitted under DNREC's Division of Waste & Hazardous Substances Division. Mulching facilities are not regulated by the Division of Waste and Hazardous Substances (DWHS). Blessings Blends in Milton and Town of Seaford WWTP fall under the regulatory authority of the DNREC Division of Water. Perdue AgriRecycle in Seaford and Mt. Cuba Center in Hockessin fall under the regulatory authority of the State of Delaware Division of Waste and Hazardous Substances which regulates composting facilities other than those composting biosolids.
  - Mindy mentioned that Clean Bay is the closest to developing anaerobic digestion in the area and is targeting only chicken litter. To contain operational costs, the facility would

need to collect “lots” of chicken litter. Clean Bay expects to receive 250 tons of poultry litter per day.

- Mike Parkowski reminded the group that chicken litter does not count towards recycling as it is considered a solid waste.
- Mindy said that Clean Bay has talked about accepting food waste but it will be a minor feedstock.
- Mike Parkowski asked if there were an odor issue with Perdue AgriRecycle and Mindy said “No, not that we’ve been made aware of.” Mindy showed an aerial view of the composting facility and explained that for one to two months, raw chicken litter mixed with hatchery waste, dissolved air floatation cake and ground wood chips newly brought into the facility are kept under cover and are not exposed.
- Marj reminded everyone that in order for large scale composting to be effective, there needs to be consistent feed stocks, by example Perdue accepts chicken litter.
- Mindy remarked that there must be an end market for composted material, i.e., something that someone wants to buy.
- Mike Parkowski said DSWA is actively engaged in reviewing small scale projects such as the one at the University of Delaware; he believes the focus should be on small scale composting on site where the material is produced.
- Steve Masterson added that WAWA Convenience Stores capture day old food waste.

#### **Review recommendations of the Organics Task Force final report.**

- Discussion ensued. See compilation of report recommendations and follow up remarks by DSWA and DNREC – attached.

#### **Review recommendations of “Analysis of Organics Diversion Alternatives, Report to the Delaware Solid Waste Authority, September 2017” as prepared by DSM.**

- Discussion ensued. See compilation of report recommendations and follow up remarks by DSWA and DNREC – attached.

#### **Discussion of path forward relative to organics diversion.**

- Develop RPAC recommendations – deferred to the February meeting.

#### **Reports on attendance at the Fall 2017 North East Recycling Council (NERC) Conference. Mike Parkowski, DSWA, and Don Long, DNREC.**

- Deferred.

#### **Legislative Updates.**

- Deferred.

#### **Recycling Market Update. Status of National Sword initiative now past imposed deadline.**

- Mike Parkowski gave an update on China’s newly implemented “National Sword” (NS) policy regarding recycling commodities that China purchases globally. The program went into effect in December 2017 and has had a “massive impact” on US and global recycling markets. NS restricts contamination percentage on mixed paper and plastics to 0.5%, down from 4%. As a result many counties in Oregon are hauling single stream **recycling** to landfills, California is stockpiling recyclables and Delaware is able to maintain in the short term due to a mix of 20%

global markets (mostly China) and 80% domestic markets. Mike reported that the Delaware Materials Recovery Facility (MRF) because it is somewhat new can achieve a 0.5% contamination threshold if it slows down the processing line, whereas many other states and countries around the world cannot. Delaware's MRF runs picking belts at 35MPH. In order to reach the required contamination levels the belts must be slowed down but this would cause leftover tonnages of unprocessed recyclables each day to the point where in about 3 days, all space to store recyclables will be taken up, i.e., nowhere else to stockpile additional recyclables coming into the MRF. Mike stated that with 320 tons of recyclables per day arriving at the MRF processing on a slower belt speed it would yield many tons of leftover recyclables each day with available space for storage only about 6 days.

- Mike stated that for those processors who cannot meet the lower contamination standard, domestic markets could take the recyclables but it could come at a cost to the processor. Processors in this situation are running at a loss and the question is how much longer can they sustain these losses?
- Mike sees a future scenario where haulers will simply not pick up recyclables.
- Steve Masterson told the group that the largest waste hauler in the US has pulled its investments out of the recycling business as the company sees "no end in sight" with making money on recycling.
- Vikram Krishnamurthy asked if RPAC should update its 16<sup>th</sup> Annual Report section with information on National Sword. Mike said he would prefer a "wait and see" stance and discuss where Delaware is in 6 months. He restated that Delaware is in a much greater position than others and told the group that many parts of the UK are no longer collecting recycling currently. Stan also asked if the Annual Report should mention National Sword or would a separate report, down the road, be more appropriate.
- Julie mentioned putting information about National Sword in a cover letter to the Annual Report.
- Mike reiterated that Delaware is still able to move material but there is a crisis looming. When the MRF can no longer take recyclables, DSWA will go to DNREC and ask for an exemption so that recyclables can be diverted to the landfills or waste to energy. He also restated that we are better off in Delaware than the West Coast due to our domestic markets at about 80% of our total.
- Deidre Durham, Public, spoke about the need to reduce plastics and it is time to move beyond use and recycling to reducing plastics
- Paul Bickhart advised that National Sword only affects MRFs that take in mixed paper. Other processing plants that only recycle high quality office paper and cardboard are fine.

**Additional Public Comments.** None.

**Discuss future agenda content.** Deferred.

**Review 2018 meeting calendar and meeting locations.** Deferred.

**Next meeting:**

- The February meeting will be held at the Cherry Island Landfill in Wilmington. There will be a shorter meeting and a tour of the landfill for those in attendance. Stan indicated a change from the Lewes location to New Castle to balance out the meeting locations.

## **Adjourn.**

- Meeting adjourned at 3:05 p.m.

## **Attachment (below):**

- Compilation of organics report recommendations and follow up remarks by DSWA and DNREC.

## **Attachment to RPAC meeting minutes of January 24, 2018**

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**DATE:** January 31, 2018  
**COMPILER:** STAN MILLS  
**RE:** Recent ongoing Organics discussions by RPAC council. Compilation of report recommendations and follow up remarks by DSWA and DNREC per the RPAC meeting of January 24, 2018.  
**NOTE:** DSWA comments were offered by Mike Parkowski.  
DNREC comments were offered by Marj Crofts.  
Other comments as noted.

Language in bold = actual language from the reports.

## **RECOMMENDATIONS OF THE DELAWARE ORGANICS TASK FORCE SCR 35, MARCH 1, 2016.**

**1. All organic waste recycling projects should, at least initially, be restricted to smaller scale projects (≤30,000 tons/year) using the best management practices available. Expansion may be considered once the facility has demonstrated the ability to operate successfully for at least one year.**

DSWA: Agrees with restricting to small-scale projects. DSWA is not the permitting agency – DNREC is.

DNREC: Currently DNREC is implementing this recommendation

**2. Employ several projects spread throughout the State targeting specific large generators of organic waste in Delaware as opposed to one large facility designed to manage all of the State's waste.**

DSWA: Agrees with this approach. Note these Task Force recommendations were issued prior to the more recent DSM report. DSM reports on DSWA working with UDel targeting food waste on a small scale. Mike emphasized that a homogeneous stream of materials is required.

DNREC. DNREC would permit facilities and would not be involved in designing or siting them.

**3. As part of the approval/permitting process, ensure markets exist for products produced by the technology used.**

DNREC. Permits must demonstrate final use and ability to distribute whether in or out of state.

**4. All projects must be permitted and closely monitored by DNREC and/or DSWA as required by Delaware code and require the implementation of best management practices.**

DNREC. Yes, projects are inspected and monitored.

**5. Encourage DSWA and other private industries to develop small-scale Organic Waste processing facilities.**

DSWA. They are engaged in these specific projects and focus on small site projects. Markets control scale. Not there now for small scale.

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**Recommendations (“Potential Next Steps”) of the “Analysis of Organics Diversion Alternatives Report to the Delaware Solid Waste Authority, September 2017” as prepared by DSM Environmental Services, Inc.**

**This analysis clearly shows that developing a central organics processing facility to divert food waste from DSWA landfills will result in significantly higher costs than continued landfilling, and with relatively minor GHG emission reductions. However, much higher GHG emissions reduction benefits lie in focusing on food waste reduction and even redistribution and at lower costs.**

**There are many other steps that Delaware can take, as described below, to continue to move forward with increasing diversion of food waste, other than through development of a central organics processing facility.**

**First, Delaware state agencies involved in food handling and preparation should begin assessing the potential to integrate food waste reduction training into their food safety programs, as well as teaming with trade organizations involved in food preparation. Grants might be made available to help achieve this.**

DSWA. Federal level. Successful programs that cut down on food waste volumes are in New York and in New York City. Sees potential through state agencies, e.g. DSWA, DNREC, EPA, etc.

**Second, the Delaware State Legislature can consider expanding the already existing liability protection for edible food waste generators to be able to donate their food without having to go through the existing institutions, but under guidelines specified in the legislation and subsequent rule making.**

DSWA. Some states in NE U.S. are seeking this. Most interest in the US in food sharing is in the West and Southwest parts of the country. Problem is one of logistics and transportation as this type of food sharing involves volunteers who pick up and drop off the food. The UDel project previously mentioned would be fall in this category of organic waste diversion.

DNREC. Marj believes this would be a good one for RPAC to pursue. Food Bank should be on our radar.

Julie Miro-Wenger added that legislation was introduced last year by Delaware's General Assembly relative to a Good Samaritan Rule. The proposed legislation was derailed by the Trial Lawyers Association. Julie will forward the most recent legislation on this.

**Third, the Delaware Department of Agriculture could work with DSWA and DNREC to try to expand efforts to assist hog farmers, especially with sourcing pre-plate food waste. A logical way to start would be to develop an exchange where hog (and cattle) farmers as well as generators of pre-plate food waste could list on a free exchange organized by the Department of Agriculture.**

DSWA. While on their radar they have not yet delved into this. Strong in mid-West. Looking into pet feed. Still working with UDel.

Mindy Anthony offered that there are some related apps and databases available nationwide.

**Fourth, DNREC and DSWA should work with County and Municipal waste water treatment authorities to identify the most appropriate on-site treatment systems for food waste that will not negatively impact sewer line clogging or BOD, nitrogen and phosphorous limits. To the extent these systems can be identified, it may make sense to create grant funding that might help large food waste generators justify the cost of installation, given the potential savings in container rental, pull charges and tipping fees for heavy food waste.**

DSWA. Falls in line with ongoing research with UDel. Want to ensure any implementation does not put a burden on the waste water system.

DNREC. If on-site treatment systems fall within NPDES (National Pollutant Discharge Elimination System) permits, the system operator will need to work with the Division of Water on permit requirements.

**Fifth, DSWA should meet with the Kent County Public Works Department to explore collaboration on the potential development of an anaerobic digester for production of energy from their sludge. It is DSM's observation that co-digestion of waste water sludge and food waste is one way to lower the cost of AD facilities to the point where it is cost-effective when compared to landfilling of food waste.**

DSWA. Kent County was the one to reach out and contacted DSM first. Kent County public works director left them and an interim director is there. DSWA intends to pursue when a new director is onboard.

***RPAC discussion stopped here. Discussion will continue at the February RPAC meeting.***

**Sixth, and similarly, DSWA should continue to discuss with the City of Wilmington the potential for delivery of slurried food waste to the Wilmington WWTP digesters of ICI food waste delivered to the Cherry Island Landfill and processed through a food de-packaging machine.**

**Seventh, DSWA should continue working with the University of Delaware to research and develop on-site digestion options for food waste. The University currently has a small on-site digestion project at the Caesar Rodney Dining Hall. This program is diverting pre-plate and post-plate food waste to a small unit which breaks down food with enzymes and releases the digestate into the waste water treatment system. DSWA and the University should continue research of this technology and closely track the results. This research should include looking at diversion potential but also O&M issues, contamination levels and tolerance, emissions reductions, and digestate quality and applications.**

DSWA. (Yet to be discussed.)

DNREC. (Yet to be discussed.)

**Finally, DSWA should expand its education program to the public on the benefits of backyard composting and food waste disposal systems. DSWA should also consider developing a food waste diversion grant program which could provide funding to individuals or businesses that wish to engage in the practice of food waste diversion. DSWA could collaborate with the Delaware Recycling Public Advisory Council (RPAC) on the best practices to administer the grant application and review process.**

DSWA. (Yet to be discussed.)

DNREC. (Yet to be discussed.)